

## ABSTRACT

A flow calculation unit (102) classifies packets of data to be transmitted according to each packet header. A stream data determination unit (106) organizes a  
5 set of packets having the same packet header as a packet group according to the classified result by the flow number calculation unit (102), and determines whether to transmit with a bandwidth guaranteed according to the bit rate of the packet group. A  
bandwidth request command generation unit (107) requests a bandwidth control device to reserve a bandwidth for the packet group determined to be transmitted with a  
10 bandwidth guaranteed by the stream data determination unit (106). Therefore, a bandwidth can be automatically reserved to allow data transmission even when no transmission condition is specified by the application.